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| PRE-APPEAL BRIEF REQUEST FOR REVIEW | | Docket Number (Optional) 60449-095 | | | |
| <div style="text-align: center;">CERTIFICATE OF FACSIMILE</div> I hereby certify that this Pre-Appeal Brief Request For Review and Notice of Appeal are being facsimile transmitted to (571) 273-8300. on <u>June 18, 2008</u> Signature <u>/Lindsey C. Fortney/</u> Typed or printed name <u>Lindsey C. Fortney</u> | | Application Number 10/783,390 | Filed 02/20/2004 | | |
| | | First Named Inventor Basir et al. | | | |
| | | Art Unit 3663 | Examiner Gooden, Jr., Barry J. | | |
| <p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top;"><div style="margin-bottom: 10px;"><input type="checkbox"/> applicant/inventor.</div><div style="margin-bottom: 10px;"><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</div><div style="margin-bottom: 10px;"><input checked="" type="checkbox"/> attorney or agent of record. 37,794 Registration number _____</div><div><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</div></td><td style="width: 50%; vertical-align: top; border-left: 1px solid black; padding-left: 10px;"><div style="margin-bottom: 10px;"><u>/John E. Carlson/</u> Signature John E. Carlson Typed or printed name</div><div style="margin-bottom: 10px;">248-988-8360 Telephone number</div><div>June 18, 2008 Date</div></td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> | | | | <div style="margin-bottom: 10px;"><input type="checkbox"/> applicant/inventor.</div> <div style="margin-bottom: 10px;"><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</div> <div style="margin-bottom: 10px;"><input checked="" type="checkbox"/> attorney or agent of record. 37,794 Registration number _____</div> <div><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</div> | <div style="margin-bottom: 10px;"><u>/John E. Carlson/</u> Signature John E. Carlson Typed or printed name</div> <div style="margin-bottom: 10px;">248-988-8360 Telephone number</div> <div>June 18, 2008 Date</div> |
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| <div style="border: 1px solid black; padding: 5px;"><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</div> | | | | | |

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|-------------|-------------------------------------------------------------------------|-------------------|-----------------------|
| Applicant: | Basir et al. | Art Unit: | 3663 |
| Serial No.: | 10/783,390 | Examiner: | Gooden, Jr., Barry J. |
| Filed: | 02/20/2004 | Confirmation No.: | 6422 |
| For: | ADAPTIVE VISUAL OCCUPANT DETECTION AND CLASSIFICATION SYSTEM | | |

Commissioner for Patents
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REQUEST FOR PRE-APPEAL BRIEF CONFERENCE REVIEW

Applicant requests review of the Final Office Action mailed December 18, 2007 for the reasons stated below.

Claims 1-14 and 25-38 stand rejected.

SUMMARY OF INVENTION

This invention relates to the field of image-based vehicle occupant detection and classification. More specifically, the invention uses an imaging system in order to classify a vehicle seat into a number of occupancy classes, the minimum of which includes (i) empty, (ii) occupied by an adult passenger, (iii) occupied by a child passenger, (iv) occupied by a forward facing infant seat, (v) occupied by a rear facing infant seat. One purpose of the classification is to control deployment of an airbag, by either choosing not to deploy the airbag (in the case of a rear-facing infant seat or a child occupant), or by altering the amount of force of deployment of the airbag.

Claim 1, for example, recites capturing an image of an occupant area in a vehicle and dividing the image into a plurality of subimages of predetermined spatial regions. A spatial

feature matrix of the image is generated based upon the plurality of subimages. The occupant in the occupant area is then classified based upon analyzing the spatial feature matrix. The occupant is classified into a classification, wherein the classifications include: adult and child.

Claim 25 recites, “classifying an occupant in the occupant area based upon analyzing low-level descriptors into one of a plurality of classifications, wherein the classifications include: infant seat.”

Claim 34 recites, “determining whether the occupant area is occupied by a person based upon said step d).”

ARGUMENT

Claims 1-9, 14, 25-29 and 32-38 have been rejected as obvious over Kung (US 5,850,470) in view of Christi (US 20040176891). Kung does not classify an occupant of a vehicle as the Examiner states. Kung *identifies* a person (for example, for accessing an ATM), but only if that person is known in the database. Kung provides no “classification” of the person. Therefore, claims 1 and 25 are not anticipated by Kung.

Further, there is no point in “classifying” a person who is not an “occupant of a vehicle” with the invention of Kung. The purpose of Kung is to *identify* people, such as for an “ATM, access control, surveillance, and video conferencing.” (col. 1, lines 18-19). It would be insufficient to *classify* a person using an ATM - - the person must be *identified*. Therefore, it makes no sense to modify Kung to *classify* people.

Further, all of the algorithms in Kung are directed toward comparing the face of the person with stored images in a database in order to identify a person. None of these teachings would be useful in *classifying* a person. In particular, none of these teachings would be useful for *classifying* a person as “adult or child,” as recited in claim 1. Nor would these teachings be used for a classification such as “infant seat,” as recited in claim 25. Nor would these teachings be used to determine whether the occupant area is occupied, as recited in claim 34.

Christi does not disclose classifying a person based upon a spatial feature matrix. Christi does classify an occupant, but not based upon a spatial feature matrix. Therefore, even if the

references were somehow combined (which does not make sense), the claims would still not be met.

If any additional fees are due, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully Submitted,

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Dated: June 18, 2008